Fig. 10. Autographa celsa, race sierræ n. race (from type).

Fig. 11. Abrostola parvula B. and McD.

Fig. 12. Abrostola microvalis n. sp. (from type).

Fig. 13. Autographa magnifica n. sp. (from type).

Fig. 14. Autographa celsa Hy. Edw. (from type).

IDIOCERUS COGNATUS FIEBER, ESTABLISHED IN NORTH AMERICA.

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In 1908 the writer collected several specimens of an *Idiocerus* belonging to a species unknown to our fauna and submitted these to Mr. E. P. Van Duzee for determination. They came back labelled "*Idiocerus sp.* unknown to me." Mr. Van Duzee further remarked in an accompanying note that as soon as time permitted he would look up regarding these. Since then specimens have been collected from time to time in various places. On October 10, 1916, by sweeping the lower branches of a white poplar (*Populus alba*), over one hundred specimens were collected in half a dozen sweeps of the net. A great many more could have been taken from this tree, of which there are only two in the immediate neighborhood. Nearly all were females, only five males in the lot.

Coincidentally with this Messrs. Harry B. Weiss and Edgar L. Dickerson presented specimens of this same *Idioccrus* species which they had also taken abundantly on *Populus alba* in New Jersey, and, contemplating the working out of its life history, its identity was obviously desired. It was at first thought to be a new species, but in looking up some European literature several descriptions were met with which applied very well. For the present and until specimens can be obtained from Europe to compare with our American form, it will be safe to call it *Idioccrus cognatus* Fieber = *I. distinguendus* Kirschbaum.

As far as can be ascertained from descriptions and figures it resembles somewhat *I. rufus* Gillette and Baker and *I. rufus* var. cinqulatus Ball, but in the structural characters of the face and geni-

talia and in the color it differs from *I. rufus*. The variety *cingulatus* comes closer in color, but its structure is too indefinitely described to permit of comparison. The following description will further serve to identify it.

Face one-fifth wider than long; clypeus nearly one-half longer than broad at apex, about twice as long as at its base, distinctly swelling lateral at the truncated apex; lorae longer than clypeus and its width four-fifths that of the clypean apex; genæ depressed beneath the eyes, the lateral margins slightly convex just below the eves, then more or less straight attaining the tip of the clypeus; front as broad as long; antennæ without any disk. Vertex a trifle shorter on the middle than next to the eyes; the distance between the eyes more than four times the length of the center of the vertex; fine transverse rugosity barely visible. Pronotum more than twice as long as broad. Scutellum one and one-half times as broad as long, with a decided impression on the disk. Face, vertex, pronotum and scutellum very finely and evenly granulated. Elytral veins prominent and with punctures, four apical and three anteapical cells; inner anteapical cell more than twice as long as the outer one. Last ventral segment of the male twice triangularly excavated, leaving a prominent, triangular, central tooth with a slightly rounded tip, the whole segment longitudinally rugulose. Plates long and twisting near the apex, terminating in long, fine, white hairs. Last ventral segment of the female strongly rounding and without any median notch, ovipositor slightly longer than pygofer.

Color of male. Face from greenish white to strong yellow in the highly colored specimens; occili yellowish brown, encircled with pale; eyes dark red, sometimes nearly black; basal segments of the antennæ the color of the face, the long, tapering filaments rapidly recoming quite dark. Vertex like the face, with a tendency to be slightly darker discoidally and devoid of any spots. Disk of pronotum with a bluish-gray cast; margins paler, usually with a pair of faint dark spots on the anterior half. Scutellum yellow with the discal impression dark, in some specimens quite strongly marked; basal angles sometimes marked with brown triangles. Elytra transparent milky white, with the area from the base to about the level of the tip of the scutellum a trifle smoky; a stronger smoky brown area located from just behind the middle to before the tip of the clavus, extending

transversally between points just in front of the outer anteapical cells; a third smoky area covering the three inner apical cells and the appendage. Veins in the light areas milky white and in the dark areas dark brown. Body and legs below pale, except the distal tips of the tibiæ and the tarsi, which are tipped with brown, and the blackish claws.

The females are generally more strongly colored, usually with a large dark spot on the rounded vertex, bisected by a pale line, and a black spot on either side, the elytra and scutellum are also stronger marked in this sex.

This species occurs in Central Europe. Fieber described it from a male from Austria. (Have been unable to consult Kirschbaum's writings.) Edwards gives only a few localities of its occurrence on the British Islands. Jensen Haarup gives a single locality in Denmark. In this country it has been taken at the following places: Maspeth, L. I., N. Y., Aug. 1, 1908, Oct. 10, 1916, Sept. 1, 1917; Port Washington, L. I., N. Y., Sept. 15, 1908; Winfield, L. I., N. Y., July 17, 1909 (Chris. E. Olsen). Irvington, N. J., July 14, and other New Jersey localities (Edgar L. Dickerson and H. B. Weiss). In all cases where food-plant is mentioned *Populus alba* is given.

I wish here to express my appreciations to Prof. Herbert Osborn, Dr. E. D. Ball and Mr. E. P. Van Duzee for their kind and helpful correspondence of which I availed myself in the preparation of the above notes.

EXPLANATION OF PLATE XVI.

Fig. 1. Face of a female.

Fig. 2. Dorsal view of a male.

Fig. 3. Genitalia of a female.

Fig. 4. Genitalia of a male.

Figs. 1, 3, and 4 are drawn to the same scale, fig. 2 is only half the size of the others.